- "2-Wire HDSL-Compatible Loop" or "HDSL 2W" is a transmission path which facilitates the transmission of a 768 kbps digital signal over a 2-Wire, non-loaded twisted copper pair meeting the specifications in ANSI T1E1 Committee Technical Report Number 28. HDSL compatible Loops are available only where existing copper facilities can meet the T1E1 Technical Report Number 28 and AM-TR-TMO-000123 specifications.
- "4-Wire HDSL-Compatible Loop" or "HDSL 4W" is a transmission path which facilitates the transmission of a 1.544 Mbps digital signal over two 2-Wire, non-loaded twisted copper pairs meeting the specifications in ANSI T1E1 Committee Technical Report Number 28 and AM TR-TMO-000123. HDSL compatible Loops are available only where existing copper facilities can meet the T1E1 Technical Report Number 28 specifications.
- "4-Wire 64 Kbps Digital Loop" or "4-Wire 64 Digital" is a transmission path which supports transmission of digital signals of up to a maximum binary information rate of 64 Kbps and terminates in a 4-Wire electrical interface at both the Customer premises and on the MDF in Ameritech's Central Office. 4-Wire 64 Digital will be provided in accordance with the specifications, interfaces and parameters described in AM-TR-TMO-000123.
- "4-Wire 1.544 Mbps Digital Loop" or "1.544 Mbps Digital" is a transmission path which supports transmission of digital signals of up to a maximum binary information rate of 1.544 Mbps and terminates in a 4-Wire electrical interface at the Customer premises and on the DSX frame in Ameritech's Central Office. 1.544 Mbps Digital will be provided in accordance with the specifications, interfaces and parameters described in AM-TR-TMO-00023.

UNBUNDLED ACCESS TO NETWORK INTERFACE DEVICES

Ameritech's Network Interface Device ("NID") is a Network Element that utilizes a cross-connect device to connect loop facilities to inside wiring.

Ameritech will permit AT&T to connect AT&T's loop to the inside wiring of the Customer's premises through Ameritech's NID, where necessary. AT&T must establish the connection to Ameritech's NID through an adjoining NID which serves as the network interface or demarcation for AT&T's loop.

Maintenance and control of premises (inside wiring) is under the control of the Customer. Any conflicts between service providers for access to the Customer's inside wire must be resolved by the Customer.

SWITCHING CAPABILITY

- 1.0 Local Switching. The local switching capability of a Network Element is defined as:
 - (1) line-side facilities, which include the connection between a Loop termination at the Main Distribution Frame and a switch line card;
 - (2) trunk-side facilities, which include the connection between trunk termination at a trunk-side cross- connect panel and a switch trunk card; and
 - (3) all features, functions, and capabilities of the switch available from the specific port type (line side or trunk side port), which include:
 - (a) the basic switching function of connecting lines to lines, lines to trunks, trunks to lines, and trunks to trunks, as well as the same basic capabilities made available to Ameritech's Customers, such as a telephone number, white page listing, and dial tone;
 - (b) access to operator services, directory assistance and 9-1-1; and
 - (c) all other features that the switch provides, including custom calling, CLASS features and Centrex, as well as any technically feasible customized routing functions available from such switch.

When local switching is provided by Ameritech, AT&T will receive Customer Usage Data and billing information in accordance with the requirements of Section 10.16.

2.0 Tandem Switching.

- 2.1 The Tandem Switching Capability Network Element is defined as:
- (1) an unbundled Network Element in Ameritech's Class 4 non-TOPS digital Tandem Switches, which includes Interconnection with the trunk at the Tandem Distribution Frame ("TDF") and the Tandem Switch trunk ports;
- (2) the basic switching function of creating a temporary transmission path that connects AT&T's trunks to the trunks of Ameritech, IXCs, ICOs, CMRS, and other LECs interconnected to the Tandem Switch

- 2.2 Interconnecting trunk types which can be switched include FGB, FGC, FGD and Type II. Signaling support includes Rotary, MF, and SS7 and any signaling conversions between these signaling formats.
- 2.3 Variations in Tandem Switching equipment used to provide service in specific locations may cause differences in the operation of certain features.
- 2.4 The unbundled Tandem Switching Network Element will provide to AT&T all available basic Tandem Switching functions and basic capabilities that are centralized in the Tandem Switch (and not in End Office Switches), including the following functions Ameritech makes available to its Customers:
 - 1. Routing of calls from an inbound trunk to an outbound trunk based on destination digits.
 - 2. Routing of Equal Access or Operator Service calls from an inbound trunk to an outbound trunk based on the CIC forwarded by the inbound trunk.
- 2.5 Translations, screening, blocking, and route indexing are provided if technically feasible under the standard switching translations and screening in use in that switch. A request for translations, screening, blocking, route indexing other than what is available (i.e., features that the switch is capable of providing) in that switch will be provided where technically feasible as a Bona Fide Request. Ameritech will provide these features if technically feasible and upon agreement by AT&T to pay the applicable recurring and nonrecurring costs of developing, installing, providing and maintaining the capability. Variations in the Tandem Switching equipment or translation and screening used to provide service in specific locations may cause differences in the operation of the element.

INTEROFFICE TRANSMISSION FACILITIES

Interoffice Transmission Facilities are Ameritech transmission facilities dedicated to a particular Customer or carrier, or shared by more than one Customer or carrier, used to provide Telecommunications Services between Wire Centers owned by Ameritech or AT&T, or between Switches owned by Ameritech or AT&T.

- 1. Ameritech provides several varieties of unbundled transport facilities:
- 1.1. Unbundled dedicated interoffice transport facility ("Dedicated Transport") is a dedicated facility connecting two Ameritech Central Offices buildings via Ameritech transmission equipment. In each Central Office building, AT&T will Cross-Connect this facility to its own transmission equipment (physically or virtually) Collocated in each Wire Center, or to other unbundled Network Elements provided by Ameritech to the extent the requested combination is technically feasible and is consistent with other standards established by the FCC for the combination of unbundled Network Elements. All applicable digital Cross-Connect, multiplexing, and Collocation space charges apply at an additional cost.
- 1.2. "Unbundled dedicated entrance facility" is a dedicated facility connecting Ameritech's transmission equipment in an Ameritech Central Office with AT&T's transmission equipment in AT&T's Wire Center for the purposes of providing Telecommunications Services.
- 1.3. Shared transport transmission facilities ("Shared Transport") are a billing arrangement where two (2) or more carriers share the features, functions and capabilities of transmission facilities between the same types of locations as described for dedicated transport in <u>Sections 1.1</u> and <u>1.2</u> preceding and share the costs.
- 2. Ameritech shall offer Interoffice Transmission Facilities in each of the following ways:
- 2.1. As a dedicated transmission path (e.g., DS1, DS3, OC3, OC12 and OC48) dedicated to AT&T.
 - 2.2. As a shared transmission path as described in Section 1.3 above.

- 3. Where Dedicated Transport or Shared Transport is provided, it shall include (as appropriate):
 - 3.1. The transmission path at the requested speed or bit rate.
- 3.2. The following optional features are available; if requested by AT&T, at additional cost:
 - 3.2.1. Clear Channel Capability per 1.544 Mbps (DS1) bit stream.
 - 3.2.2. Ameritech provided Central Office multiplexing:
 - (a) DS3 to DS1 multiplexing; and
 - (b) DS1 to Voice/Base Rate/128, 256, 384 Kpbs Transport multiplexing.
 - 3.3. If requested by AT&T, the following are available at an additional cost:
 - 3.3.1. 1+1 Protection for OC3, OC12 and OC48.
 - 3.3.2. 1+1 Protection with Cable Survivability for OC3, OC12 and OC48.
 - 3.3.3. 1+1 Protection with Route Survivability for OC3, OC12 and OC48.
- 4. Technical Requirements.

This Section sets forth technical requirements for all Interoffice Transmission Facilities:

- 4.1. When Ameritech provides Dedicated Transport as a circuit, the entire designated transmission facility (e.g., DS1, DS3, and where available, STS-1) shall be dedicated to AT&T designated traffic.
- 4.2. Ameritech shall offer Dedicated Transport in all then currently available technologies including DS1 and DS3 transport systems, SONET Bi-directional Line Switched Rings, SONET Unidirectional Path Switched Rings, and SONET point-to-point transport systems (including linear add-drop systems), at all available transmission bit rates, except subrate services, where available.
- 4.3. For DS1 facilities, Dedicated Transport shall, at a minimum, meet the performance, availability, jitter, and delay requirements specified for Customer Interface to Central Office "CI to CO" connections in the applicable technical references set forth under Dedicated and Shared Transport in the Technical Reference Schedule.

- 4.4. For DS3 and, where available, STS-1 facilities and higher rate facilities, Dedicated Transport shall, at a minimum, meet the performance, availability, jitter, and delay requirements specified for Customer Interface to Central Office "CI to CO" connections in the applicable technical references set forth under Dedicated and Shared Transport in the Technical Reference Schedule.
- 4.5. When requested by AT&T, Dedicated Transport shall provide physical diversity. Physical diversity means that two circuits are provisioned in such a way that no single failure of facilities or equipment will cause a failure on both circuits.
- 4.6. When physical diversity is requested by AT&T, Ameritech shall provide the maximum feasible physical separation between intra-office and inter-office transmission paths (unless otherwise agreed by AT&T).
 - 4.7. Any request by AT&T for diversity shall be subject to additional charges.
- 4.8. Upon AT&T's request and its payment of any additional charges, Ameritech shall provide immediate and continuous remote access to performance monitoring and alarm data affecting, or potentially affecting, AT&T's traffic.
- 4.9. Ameritech shall offer the following interface transmission rates for Dedicated Transport:
 - 4.9.1. DS1 (Extended SuperFrame ESF, D4, and unframed applications (if used by Ameritech));
 - 4.9.2. DS3 (C-bit Parity and M13 and unframed applications (if used by Ameritech) shall be provided);
 - 4.9.3. SONET standard interface rates in accordance with the applicable ANSI technical references set forth under Dedicated and Shared Transport in the Technical Reference Schedule. In particular, where STS-1 is available, VT1.5 based STS-1s will be the interface at an AT&T service node.
- 4.10. Upon AT&T's request, Ameritech shall provide AT&T with electronic provisioning control of an AT&T specified Dedicated Transport through Ameritech Network Reconfiguration Service (ANRS) on the rates, terms and conditions in F.C.C. Tariff No. 2.
- 4.11. Ameritech shall permit, at applicable rates, AT&T to obtain the functionality provided by DCS together with and separate from dedicated transport in the same manner that Ameritech offers such capabilities to IXCs that purchase transport services. If AT&T requests additional functionality, such request shall be made through the Bona Fide Request process.

SIGNALING NETWORKS AND CALL-RELATED DATABASES

1.0 Signaling Transfer Points.

A Signaling Transfer Point (STP) is a signaling network function that includes all of the capabilities provided by the signaling transfer point switches (STPSs) and their associated signaling links which enable the exchange of SS7 messages among and between switching elements, database elements and signaling transfer point switches.

1.1. Technical Requirements.

- 1.1.1. STPs shall provide access to all other Network Elements connected to Ameritech SS7 network. These include:
 - 1.1.1.1. Ameritech Local Switching or Tandem Switching;
 - 1.1.1.2. Ameritech Service Control Points/Databases;
 - 1.1.1.3. Third-party local or tandem switching systems; and
 - 1.1.1.4. Third-party-provided STPSs.
- 1.1.2. The connectivity provided by STPs shall fully support the functions of all other Network Elements connected to the Ameritech SS7 network. This explicitly includes the use of the Ameritech SS7 network to convey messages which neither originate nor terminate at a Signaling End Point directly connected to the Ameritech SS7 network (i.e., transient messages). When the Ameritech SS7 network is used to convey transient messages, there shall be no alteration of the Integrated Services Digital Network User Part (ISDNUP) or Transaction Capabilities Application Part (TCAP) user data that constitutes the content of the message.
- 1.1.3. If an Ameritech Tandem Switch routes calling traffic, based on dialed or translated digits, on SS7 trunks between an AT&T local switch and third party local switch, the Ameritech SS7 network shall convey the TCAP messages that are necessary to provide Call Management features (Automatic Callback, Automatic Recall, and Screening List Editing) between the AT&T local STPSs and the STPSs that provide connectivity with the third party local switch, even if the third party local switch is not directly connected to the Ameritech STPSs, based on the routing instruction provided in each message.

- 1.1.4. STPs shall provide all functions of the MTP as specified in ANSI T1.111. This includes:
 - 1.1.4.1. Signaling Data Link functions, as specified in ANSI T1.111.2:
 - 1.1.4.2. Signaling Link functions, as specified in ANSI T1.111.3; and
 - 1.1.4.3. Signaling Network Management functions, as specified in ANSI T1.111.4.
- 1.1.5. STPs shall provide all functions of the SCCP necessary for Class 0 (basic connectionless) service, as specified in ANSI T1.112. In particular, this includes Global Title Translation (GTT) and SCCP Management procedures, as specified in T1.112.4. In cases where the destination signaling point is an Ameritech local or tandem switching system or database, or is an AT&T or third party local or tandem switching system directly connected to the Ameritech SS7 network, STPs shall perform final GTT of messages to the destination and SCCP Subsystem Management of the destination. In all other cases, STPs shall perform intermediate GTT of messages to a gateway pair of STPSs in an SS7 network connected with the Ameritech SS7 network, and shall not perform SCCP Subsystem Management of the destination.
- 1.1.6. STPs shall also provide the capability to route SCCP messages based on ISNI, as specified in ANSI T1.118, when this capability becomes available on Ameritech STPSs.
- 1.1.7. STPs shall provide all functions of the OMAP commonly provided by STPSs. This includes:
 - 1.1.7.1. MTP Routing Verification Test (MRVT); and
 - 1.1.7.2. SCCP Routing Verification Test (SRVT).
- 1.1.8. In cases where the destination signaling point is an Ameritech local or tandem switching system or database, or is an AT&T or third party local or tandem switching system directly connected to the Ameritech SS7 network, STPs shall perform MRVT and SRVT to the destination signaling point. In all other cases, STPs shall perform MRVT and SRVT to a gateway pair of STPSs in an SS7 network connected with the Ameritech SS7 network. This requirement shall be superseded by the specifications for Internetwork MRVT and SRVT if and when these become approved ANSI standards and available capabilities of Ameritech STPSs.
 - 1.1.9. STPs shall be equal to or better than the following performance requirements:
 - 1.1.9.1. MTP Performance, as specified in ANSI T1.111.6; and
 - 1.1.9.2. SCCP Performance, as specified in ANSI T1.112.5.

1.2. Signaling Link Transport.

1.2.1. Definition. Signaling Link Transport is a set of two (2) or four (4) dedicated 56 Kbps transmission paths between AT&T-designated Signaling Points of Interconnection (SPOI) that provides appropriate physical diversity.

Technical Requirements.

- 1.2.2. Signaling Link Transport shall consist of full duplex mode 56 Kbps transmission paths.
- 1.2.3. Of the various options available, Signaling Link Transport shall perform in the following two (2) ways:
 - a) As an "A-link" which is a connection between a switch or SCP and a Signaling Transfer Point Switch (STPS) pair; and
 - b) As a "D-link" which is a connection between two (2) STP mated pairs in different company networks (e.g., between two (2) STPS pairs for two Competitive Local Exchange Carriers (CLECs)).
- 1.2.4. Signaling Link Transport shall consist of two (2) or more signaling link layers as follows:
 - a) An A-link layer shall consist of two (2) links.
 - b) A D-link layer shall consist of four (4) links.
 - 1.2.5. A signaling link layer shall satisfy a performance objective such that:
 - a) There shall be no more than two (2) minutes down time per year for an A-link layer; and
 - b) There shall be negligible (less than two (2) seconds) down time per year for a D-link layer.
- 1.2.6. A signaling link layer shall satisfy interoffice and intraoffice diversity of facilities and equipment, such that:
 - a) No single failure of facilities or equipment causes the failure of both links in an A-link layer (i.e., the links should be provided on a minimum of two (2) separate physical paths end-to-end); and

- b) No two (2) concurrent failures of facilities or equipment shall cause the failure of all four (4) links in a D-link layer (i.e., the links should be provided on a minimum of three (3) separate physical paths end-to-end).
- 1.2.7. Interface Requirements. There shall be a DS1 (1.544 Mbps) interface at the AT&T-designated SPOI. Each 56 Kbps transmission path shall appear as a DS0 channel within the DS1 interface.

2.1. Toll Free Database Services.

2.1.1. <u>Call Routing Service</u>. The Call Routing Service provides for the identification of the carrier to whom a call is to be routed when a toll-free (1+800-NXX-XXXX or 1+888-NXX-XXXX) call is originated by Customer. This function uses the dialed digits to identify the appropriate carrier and is done by screening the full ten digits of the dialed number. The Call Routing Service may be provided in conjunction with a Customer's InterLATA or IntraLATA Switched Exchange Access Service.

When 800 Call-Routing service is provided, an originating call is suspended at the first switching office equipped with a Service Switching Point (SSP) component of the SSC/SS7 Network. The SSP launches a query over signaling links (A-links) to the Signal Transfer Point (STP), and from there to the SCP. The SCP returns a message containing the identification of the carrier to whom the call should be routed and the call is processed.

AT&T's SS7 network is used to transport the query from its End Office to the Ameritech SCP. Once AT&T's identification is provided, AT&T may use the information to route the toll-free traffic over its network. In these cases, Ameritech Switched Access services are not used to deliver a call to AT&T. The toll-free carrier ID date may not be stored for AT&T's future use.

- 2.1.2. Routing Options. In addition to the toll-free service offerings, new routing options are offered. These options are purchased by toll-free service providers to allow their clients to define complex routing requirements on their toll-free service. Toll-free routing options allow the service provider's Customer to route its toll-free calls to alternate carriers and/or destinations based on time of day, day of week, specific dates or other criteria. These routing options are in addition to the basic toll-free call routing requirements which would include the toll-free number, the intraLATA carrier, the interLATA carrier and the Area of Service (AOS).
- 2.1.3. <u>Carrier Identification</u>. AT&T may choose the 800 Carrier Identification service to obtain toll-free number screening. With this service, AT&T will launch a query to the Ameritech database using its own Service Switching Points (SSPs) network. In contrast to the Call Routing Service described in <u>Section 2.1.1</u> above, with the 800 Carrier Identification service, no routing is performed.

2.1.4. Number Administration. AT&T, at its option, may elect to use Ameritech's toll-free Service which includes toll-free Number Administration Service (NAS). With this service, Ameritech will perform the Responsible Organization service, which involves interacting with the national Service Management System (SMS/800), on behalf of the Customer. Responsible Organization services include activating, deactivating and maintaining 800/888 number records as well as trouble referral and clearance. If AT&T does not select NAS, AT&T will perform the Responsible Organization service.

2.2. LIDB Database Service.

- 2.2.1. The Line Information Database (LIDB) Query Response Service is a validation database system. It enables AT&T to offer alternately billed services to its Customers. The database provides an efficient way to validate calling cards and toll billing exception (TBE) (i.e., restricts a collect or third-party billed call). Toll fraud protection and reduced call set up expenses are among the benefits of the service.
- 2.2.2. Billing information records include the Customer name, phone number security personal identification numbers and third-party acceptance indications. Prior to call completion, a query is launched to the LIDB to determine the validity of the requested billing method. The call is then completed or denied based on the LIDB's response.

2.3. CNDS Database Service.

- 2.3.1 Caller ID identifies a calling party's telephone number through a switch-based feature installed in Ameritech's Central Office. CNDS is a CCIS/SS7 network based feature that accesses a CNDS database within the LIDB to provide a name associated with the calling party's telephone number. This service is provided using TR1188 protocol.
- 2.3.2 A Customer who subscribes to Caller ID with Name will see the listed name associated with the calling party's telephone line displayed on his/her Caller ID display unit. The telephone number associated with the telephone line of the calling party will also be displayed.
- 2.3.3 Ameritech shall charge AT&T for the CNDS Database Service in a similar manner to that which Ameritech charges AT&T for the LIDB Database Service, including a per query charge.

2.4 Local Number Portability.

2.4.1 Ameritech's provision of LNP will utilize LRN switch software based on requirements developed by the workshop participants and concurred in by the Commission. These requirements are fully compliant with the principles adopted by the

FCC in its First Report and Order, CC Docket No. 95-116 (the "Number Portability Order"). The detailed description and technical specifications for the planned LRN implementation can be found in various documents produced by the FCC Local Number Portability workshop.

2.4.2 Ameritech is fully prepared to provide LNP database access to AT&T. However, in adopting its Number Portability Order, the FCC referred certain technical and other issues to the North American Numbering Council (NANC) and issued a further notice addressing the recovery of costs associated with LNP implementation. Until these activities are concluded, Ameritech cannot finalize product descriptions and rates for access to its LNP database. Nonetheless, Ameritech is willing to begin discussions with AT&T to discuss AT&T's access to Ameritech's LNP databases in lieu of constructing AT&T's own.

2.5. Unbundled AIN Application Process.

- 2.5.1. The AIN architecture establishes a network infrastructure in which subscriber services can be defined and implemented independent from End-Office Switches. This is accomplished by a combination of SS7 signaling, interfaces between Network Elements and call-state models through which AIN Network Elements interact.
- 2.5.2. Ameritech's Unbundled AIN (Advanced Intelligent Network) Applications Access service will be provided on a nondiscriminatory basis and enable AT&T (whether it purchases unbundled switching capabilities from Ameritech or owns its own SSP (Service Switching Point)) to offer its Customers AIN services. Ameritech will make available existing AIN retail applications, as well as newly created services that AT&T creates via the Ameritech AIN Service Creation Environment (SCE) Access service. Unbundled AIN Applications Access provides for the AIN functionality necessary for the day to day ongoing call processing associated with a specific AIN applications execution. This includes the SS7 transport and SCP processing of the query associated with the specific service.
- 2.5.3. Associated with the AIN SCP is a Service Creation Environment (SCE) and a Service Management System (SMS). Ameritech offers access to the Ameritech SMS and SCE capabilities via two (2) AIN offerings: AIN Service Creation Environment Access Service and AIN Service Management System Access Service.
- 2.5.4. Carriers will share the common AIN infrastructure components provided by Ameritech, such as a Service Control Point (SCP), a Signaling Transfer Point (STP), Service Management System (SMS), and, if AT&T purchases Unbundled Switching from Ameritech, the AIN Service Switching Point (SSP). AT&T shall be responsible for assuring the compatibility of its AIN SSP software generics with the Ameritech AIN Applications and SCP software releases. Interconnection of the AT&T SSP with the Ameritech SS7 network is required, and can be accomplished in a number of ways.

- 2.5.5. Activation of the desired application at the Ameritech SCP requires subscription by both the ordering carrier AT&T and the end-user. In general, AIN operations require close cooperation between Ameritech and the requesting Carrier.
- 2.5.6. The SSP and SCP vendors provide logical capabilities which Ameritech uses to create each AIN service. The SSP and SCP vendors have no knowledge of the specific AIN Applications that Ameritech has created. Ameritech's AIN deployment is based on AIN 0.1.

3.1. AIN Service Creation Environment Access Service.

Access to Ameritech's AIN service creation functionality will be provided in a nondiscriminatory manner to AT&T to enable it to create new AIN services on Ameritech's network. If AT&T has a new AIN service concept, it can utilize all or some of the features below to obtain a fully functional AIN service. Ameritech will furnish AT&T with a list of AIN Applications and the switches on which such applications are available, including the software version of AIN on such switch type. The following is a list of AIN service creation functions available via this service offering:

- 3.1.1. Service Concept Description: The description of service idea should detail requirements such as: dialing patterns, information exchange, announcements, voice prompts, expected service management screens and reports, and CPE requirements. The AIN service creation functions made available to AT&T must be the same ones Ameritech uses, subject to any third party restrictions Ameritech may be subject to.
- 3.1.2. Creation of Technical Specification: Translation of a new service description into a technical specification including engineering requirements for Ameritech's network. The technical specification must detail how the service interacts in the network, translated in network terms, should include any expected/anticipated feature interaction discrepancies, and will include the process flows on how the service traverses the network.
- 3.1.3. Service Logic Design: The development of service design from SCP perspective to include Algorithms, Data Structures and Flow Diagrams.
- 3.1.4. Service Logic Coding: Development of machine logic in the SCE to include tables, SIBBs, and other elements as necessary.
- 3.1.5. Service Logic Testing: Service logic testing isolated within the to SCE to ensure accuracy of compilation and code development and compliance with Ameritech's AIN environment.
- 3.1.6. SMS Interface Requirements: Development of AT&T SMS interface access including screens, flow-through interface and reports. This is required to allow AT&T to activate, update, modify, and administer Customer data associated with the new service.

- 3.1.7. Platform Access Logic Configuration: Service specific updates to global infrastructure required to enable new service. Includes modification of the access logic to enable a new service.
- 3.1.8. Service Integration Testing (SIL): Intensive laboratory testing of service in conjunction with all Ameritech Switch types and or provider switch types and generics (as necessary) to minimize potential feature interaction conflicts and negative network reactions. Resources must be made available to AT&T on a nondiscriminatory basis.
- 3.1.9. Network Implementation: Conditioning of the SMS, SCP, SSP, or STP to accept service including network translations, signaling connectivity, dialing plans, and coordination of provisioning process.
- 3.1.10. Field Testing: Comprehensive controlled testing in a live switch environment, possibly at AT&T's SSP location.

3.2. AIN Service Management System Access Service.

- 3.2.1. Access to Ameritech's AIN service management system functionality will be provided in a nondiscriminatory manner to AT&T to enable it to manage AIN services located wholly within Ameritech's network (SCP & SSP) or to manage AIN services where the service logic is located within Ameritech's SCP and the Customer is served from AT&T's AIN-compatible SSP. Upon request of AT&T, Ameritech shall provide AT&T the unbundled AIN Applications Access service product description and a list of existing Ameritech AIN applications.
- 3.2.2. The Service Management System (SMS) is the administration system for the service logic and data in the Advanced Intelligent Network (AIN) Service Control Point (SCP). The SMS contains the master copy of service level, subscriber level and subscription level data. The SMS also contains a copy of the service logic.

Logical access to the SMS will be managed by a set of programs designed by Ameritech. These programs provide security for the data that resides on the AIN platforms by allowing user access to only specific data that is appropriate to the customer or carrier. Whether explicitly stated in this document or not, all access to the SMS is managed through these programs. The only exceptions to managed access to SMS functionality are for the Ameritech Network Services organizations that administer the AIN platforms. They require direct access in order to appropriately administer the platforms.

Mediated access to SMS functionality will be provided through interface programs that will be developed for specific services. AT&T will have access to all of the data that the service requires in order to administer that service for its Customers. This includes service level,

subscriber level, and subscription level data as well as any reports and measurement data that is mutually agreed upon by Ameritech and AT&T.

3.2.3. Service Logic. The SMS receives a copy of the service logic and service management logic from the Service Creation Environment (SCE) system. After population of specific network level and service level data, the SMS downloads a view of the service logic to the designated SCPs. The service management logic remains in the SMS to complement SMS utilities in the monitoring and administration of a specific service.

It is required that all of the Service Creation unit testing, System Integration Lab (SIL) testing and Network Deployment Testing has been completed.

It may be necessary for AT&T to negotiate timing and supply service specific data before that service can be deployed in the appropriate SCPs. Ameritech, however, is totally responsible for service logic deployment and initial SCP memory load in its network. AT&T will receive timing and supply of service specific data in a nondiscriminatory manner.

3.2.4. Service Administration. Service administration involves the management of service level data which the service logic requires for its execution. SMS supports the management of service specific common data. Any changes to the data representation of the Ameritech network, which impact one or more carrier services will be administered by Ameritech. Other AT&T specific or service specific data changes will be identified and administered by AT&T.

OPERATIONS SUPPORT SYSTEMS FUNCTIONS

- 1.0 Pre-Ordering, Ordering and Provisioning. Ameritech will use the interface described in Section 10.13.2(a) (including the separate interface used for ordering prior to the first quarter of 1997) for the transfer and receipt of data necessary to perform the pre-ordering, ordering, and provisioning functions (e.g., order entry, telephone number and due date selection). However, the Access Services Request (ASR) interface will be used for the transfer of information concerning the Network Elements and Combinations which AT&T intends to order in a specific Wire Center ("Footprint" or "Trunk Side Information").
- 2.0 Maintenance and Repair. Ameritech will use the interface described in <u>Section</u> 10.13.3(a) for the transfer and receipt of data necessary to perform the maintenance and repair functions (e.g., trouble receipt and trouble status).
- 3.0 Billing. Ameritech will provide appropriate usage data to AT&T to facilitate Customer billing with attendant acknowledgments and status reports and exchange information to process claims and adjustments.

OPERATOR SERVICES AND DIRECTORY SERVICES

- 1.0 Operator Services. Operator Services consist of the following services.
- 1.1 <u>Manual Call Assistance</u> manual call processing with operator involvement for the following:
 - (a) Calling card the Customer dials 0+ or 0- and provides operator with calling card number for billing purposes.
 - (b) Collect the Customer dials 0+ or 0- and asks the operator to bill the call to the called number, provided such billing is accepted by the called number.
 - (c) Third number billed the Customer dials 0+ or 0- and asks the operator to bill the call to a different number than the calling or called number.
 - (d) Operator assistance providing local and intraLATA operator assistance for the purposes of:
 - (1) assisting Customers requesting help in completing calls or requesting information on how to place calls;
 - (2) handling emergency calls;
 - (3) handling credits and coin telephone local refund requests; and
 - (4) handling person-to-person calls.
 - (e) Operator Transfer Service ("OTS") calls in which the Customer dials "0", is connected to an Ameritech operator and then requests call routing to an IXC subscribing to OTS. The operator will key the IXC's digit carrier identification code to route the Customer to the requested IXC's point of termination.
 - (f) BLV Service in which operator verifies a busy condition on a line.
 - (g) BLVI service in which operator, after verifying a busy line, interrupts the call in progress.

- 1.2 <u>Automated Call Assistance</u> mechanized call processing without operator involvement for the following:
 - (a) Automated calling card service ("ACCS") the Customer dials 0 and a telephone number, and responds to prompts to complete the billing information.
 - (b) Automated Alternate Billing Service ("AABS") -
 - (1) the Customer dials 0 and a telephone number and responds to prompts to process the call and complete the billing information (Customer branding not currently available).
 - (2) ACCS calculates charges, relates the charge to the Customer, and monitors coins deposited before connecting the 1 + intraLATA or interLATA call.
- 1.3 <u>Line Information Database ("LIDB") Validation</u> mechanized queries to a LIDB for billing validation.
- 1.4 <u>Database Access</u> To the extent technically feasible, Ameritech will provide access to databases used in the provisioning of Operator Services via AT&T's Bona Fide Request.
- 2.0 Directory Assistance. Directory Assistance ("DA") service shall consist of the following services.
- 2.1 <u>Directory Assistance</u> those calls in which the Customer dial digits designated by AT&T to obtain Directory Assistance for local numbers located within his/her NPA. Two listings will be provided per call.
- 2.2 <u>Branding</u> the ability to put messages on the front end of a DA call that is directly trunked into Ameritech's DA switch.
- 2.3 <u>Information Call Completion</u> provides a Customer who has accessed the DA service and has received a number from the Audio Response Unit ("ARU") the option of having an intraLATA call completed by pressing a specific digit on a touch tone telephone. Information Call Completion is only available to AT&T if it direct trunks its DA calls to Ameritech.
- 2.4 Upon request, and through a technically feasible arrangement, Ameritech will provide access to databases used in the provisioning of DA via AT&T's Bona Fide Request at rates that recover Ameritech's costs of developing, providing and maintaining the service. Such unbundled access to the DA database shall be for the purpose of having AT&T's Telephone

Exchange Service DA listing in the area placed into Ameritech's DA database, or to enable AT&T to read DA listing in the database so that AT&T can provide its own DA service.

- 3.0 Rate Application. Ameritech shall bill AT&T the applicable rates on a monthly basis, in accordance with the following methodology:
- 3.1 <u>Manual Call Assistance</u> operator call occurrences multiplied by the per call rate. Total call occurrences shall include all processed calls, whether or not they are completed.
- 3.2 <u>Automated Call Assistance (ACCS and AABS)</u> call occurrences multiplied by the per call occurrence rate. Total call occurrences shall include all processed calls, whether or not they are completed.
- 3.3 <u>LIDB Validation</u> validation occurrences multiplied by the LIDB validation per occurrence rate. Total validation occurrences shall include all validations, whether or not the call is completed. Ameritech will accumulate operator occurrences, automated occurrences, and LIDB validation occurrences via its Operator Services Call Analysis System ("OSCAS"). OSCAS utilizes TOPS AMA recordings to produce monthly summaries of mechanized and manual call occurrences.
- 3.4 <u>BLV</u> operator call occurrences multiplied by the per call rate. Total call occurrences shall include all processed calls whether or not they are completed.
- 3.5 <u>BLVI</u> operator call occurrences multiplied by the per call rate. Total call occurrences shall include all processed calls whether or not they are completed.
- 3.6 <u>Lost Records.</u> If Ameritech is responsible for lost, destroyed, or mutilated TOPS AMA recordings, Ameritech will not bill AT&T for those calls for which there are no records. Likewise, Ameritech shall not be held responsible by AT&T for lost revenue. However, if within ninety (90) days, actual data should become available, Ameritech will bill AT&T for those calls using actual data.

COMBINATIONS

1. <u>Unbundled Element Platform with Operator Services and Directory Assistance</u>.

Unbundled Loop
Local Switching
Operator Services and Directory Assistance
Shared Transport
Dedicated Transport
STPs
Signaling Link Transport
Service Control Points (SCPs)/Databases
Tandem Switching

2. Loop Combination

Unbundled Loop Network Interface Device

3. Switching Combination #1

Shared Transport
Dedicated Transport
STPs
Signaling Link Transport
Service Control Points (SCPs)/Databases
Tandem Switching

COMBINATIONS AVAILABLE THROUGH BONA FIDE REQUEST

1. <u>Loop/Network Combination</u>

Unbundled Loop
Shared Transport
Dedicated Transport
STPs
Signaling Link Transport
Service Control Points (SCPs)/Databases
Tandem Switching

2. Switching Combination #2

Network Interface Device
Local Switching
Shared Transport
Dedicated Transport
SS7 Message Transfer & Connection Control
Signaling Link Transport
Service Control Points (SCPs)/Databases
Tandem Switching

3. Switching Combination #3

Network Interface Device
Local Switching
Operator Systems
Shared Transport
Dedicated Transport
SS7 Message Transfer & Connection Control
Signaling Link Transport
Service Control Points (SCPs)/Databases
Tandem Switching

4. Switched Data Services

Network Interface Device Local Switching Shared Transport Dedicated Transport Tandem Switching

5. Unbundled Element Platform Without Operator Services and Directory Assistance

Unbundled Loop
Local Switching
Shared Transport
Dedicated Transport
STPs
Signaling Link Transport
Service Control Points (SCPs)/Databases
Tandem Switching

PROVISIONING OF NETWORK ELEMENTS

1.0 General Provisioning Requirements.

- 1.1 Subject to the terms of <u>Article IX</u>, AT&T may order and/or request Elements either individually or as Combinations.
- The Combinations set forth on <u>Schedule 9.3.4</u> and any additional Combination provided previously hereunder by Ameritech pursuant to the Bona Fide Request process shall be identified and described by AT&T so that they can be ordered and provisioned as a Combination and shall not require the enumeration of each Network Element within that Combination on each provisioning order; provided that in each case AT&T shall specify on each order the type of service to be provided as well as the engineering and routing characteristics (e.g., redundancy requirements and data transfer rates) AT&T requests for such Combination.
- 1.3 AT&T may order from Ameritech multiple individual Network Elements on a single order without the need to have AT&T send an order for each such Network Element if such Network Elements are (i) for a single type of service, (ii) for a single location and (iii) for the same account.
- 1.4 Ameritech shall provide provisioning services to AT&T Monday through Friday from 8:00 a.m. to 5:00 p.m. CST. AT&T may request Ameritech to provide Saturday, Sunday, holiday, and/or off-hour provisioning services. If AT&T requests that Ameritech perform provisioning services at times or on days other than as required in the preceding sentence, Ameritech shall quote, within three (3) Business Days of the request, a cost-based rate for such services. If AT&T accepts Ameritech's quote, Ameritech shall perform such provisioning services.
- Ameritech shall provide a Single Point of Contact (each, a SPOC) for ordering and provisioning contacts and order flow involved in the purchase and provisioning of Ameritech's unbundled Network Elements or Combinations. The SPOCs shall provide an electronic interface twenty-four (24) hours a day, seven (7) days a week for all ordering and provisioning order flows. Each SPOC shall also provide to AT&T a toll-free nationwide telephone number (operational from 8:00 a.m. to 5 p.m., Monday through Friday) which will be answered by capable staff trained to answer questions and resolve problems in connection with the provisioning of Network Elements or Combinations.

Ameritech shall provide to AT&T a single point of contact (the "Unbundling Ordering Center") for ordering unbundled Network Elements. A national toll-free number will be provided from 7:00 a.m. to 5:00 p.m. CST, Monday through Friday. This Unbundling Ordering Center is responsible for order acceptance, order issuance, and return of the Firm Order Commitment (FOC) to AT&T as specified in this Schedule 9.5.

In addition, Ameritech shall provide to AT&T a single point of contact (the "Unbundling Service Center") for all provisioning, maintenance, repair, and cutover coordination. A national toll-free number will be provided from 6:30 a.m. to 12:00 a.m. CST Monday through Friday. Out of hours maintenance questions are handled by a "Fold Down Center."

- Ameritech will recognize AT&T as the Customer of Record of all Network Elements and agreed to Combinations ordered by AT&T and will send all notices, invoices and pertinent Customer information directly to AT&T.
- Ameritech may not initiate any disconnection or rearrangement of any AT&T ordered Element or Combination, except as directed by AT&T or as otherwise provided in this Agreement.
- When requested by AT&T, Ameritech will schedule installation appointments with Ameritech's representative on the line with AT&T's representative until AT&T has access to Ameritech's scheduling system.
- 1.10 Ameritech will provide AT&T with a Firm Order Confirmation (FOC) for each order, within twenty-four (24) hours of Ameritech's receipt of that order, or within a different time interval agreed upon by the Implementation Team. The FOC must contain an enumeration of AT&T's ordered Network Elements or Combination features, options, physical Interconnection, quantity, and Ameritech commitment date for order completion ("Committed Due Date"), which commitment date shall be established on a nondiscriminatory basis with respect to installation dates for comparable orders at such time.
- 1.11 Upon work completion, Ameritech will provide AT&T electronically (unless otherwise notified by AT&T) with an order completion per order that states when that order was completed. Ameritech shall respond with specific order detail as enumerated on the FOC and shall state any additional charges (e.g., time and materials charges) up to a previously agreed upon limit associated with that order.